Claims:

Please amend the claims as in the following listing:

What is claimed is:

1. (currently amended) A method for improving yields in manufacturing processes, comprising:

A) identifying parameters which affect performance at a subsequent step in the process;

B) collecting data concerning individual performance parameters;

C) creating a reference scale which correlates individual parameters with probability of failure at said subsequent step in the process;

D) testing a manufactured unit to collect performance data concerning two or more of said individual parameters from [a] the manufactured unit;

E) comparing performance data concerning two or more of said individual parameters from said manufactured unit to said reference scale to assign probability of failure at said subsequent step for each of said single performance parameters;

F) calculating a Figure of Merit value concerning multiple performance parameters from said probabilities of failure for each of said single performance parameters; and

G) utilizing said Figure of Merit value to sort units.

2. (original) The method of claim 1, wherein:
said units are components.

3. (original) The method of claim 1, wherein:
said units are assemblies.

4. (original) The method of claim 1, wherein:
said units are devices.

5. (original) The method of claim 2, wherein:
said subsequent step in the process is assembly manufacturing test.

6. (original) The method of claim 3, wherein:
said probability of failure at said subsequent step in the process is field return rate.

7. (original) The method of claim 3, wherein:
said subsequent step in the process is burn-in test.

8. (original) The method of claim 1, wherein:
said Figure of Merit is projectFRate.

9. (original) The method of claim 8, wherein:
said projectFRate value is calculated from the formula
$\text{projFRate} = 1 - \{ [1-f(x1)] * [1-f(x2)] * \ldots * [1-f(xNp)] \} ** (1/Np)$.

10. (original) The method of claim 1, wherein:
said Figure of Merit is any function of $[1-f(x1)] * [1-f(x2)] * \ldots * [1-f(xNp)]$.

11. (original) The method of claim 1, wherein:
said Figure of Merit value is correlated with a probability of failure value, which is then used to sort units.

12. (original) The method of claim 1, wherein:
said Figure of Merit value is adjusted to produce a calFRate value, which is then used to sort units.

13. (original) The method of claim 1, further comprising:
H) measuring performance of sorted units; and
I) adjusting said Figure of Merit.

14. (currently amended) A method for improving yields in magnetic heads for use in manufacturing computer hard disk drives, comprising:
A) identifying parameters of the heads which effect [HDD] hard disk drive manufacturing yields;
B) collecting data concerning individual performance parameters;
C) creating a reference scale which correlates individual parameters with probability of failure in [HDD] hard disk drive;
D) testing a manufactured head to collect performance data concerning two or more of said individual parameters from a manufactured unit;
E) comparing performance data concerning two or more of said individual parameters from said manufactured head to said reference scale to assign probability of failure at HDD test, for each of said single performance parameters;
F) calculating a Figure of Merit value concerning multiple performance parameters from said probability of failure for each of said single performance parameters; and
G) utilizing said Figure of Merit value to sort heads.

15. (currently amended) The method of claim 14, wherein:
said [FOM] Figure of Merit is used to sort into groups of passing (shipped) and failing (scrapped) heads.

16. (currently amended) The method of claim 14, wherein:
said [FOM] Figure of Merit is used to sort heads for use in specific [HDD] hard disk drive models where their [HDD] hard disk drive yield is relatively higher.

17. (original) The method of claim 14, further comprising:
H) measuring performance of sorted units; and
I) adjusting said Figure of Merit.

18. (original) The method of claim 14, wherein: said Figure of Merit is projectFRate.

19. (original) The method of claim 18, wherein: said projectFRate value is calculated from the formula projFRate = 1 – { [1- *f* (x1)] * [1- *f* (x2)] * ... * [1- *f* (xNp)] } ** (1/Np).

20. (original) The method of claim 14, wherein: said Figure of Merit value is correlated with probability of failure, which is then used to sort units.

21. (original) The method of claim 14, wherein: said Figure of Merit value is adjusted to produce a calFRate value, which is then used to sort units.

22. (original) The method of claim 14, wherein: said parameters are chosen from a group consisting of amplitude, recession, magnetic spacing, magnetic stability, pole tip geometry and electrical resistance.